

ABSTRACT

A method of tuning a decision network can include a series of steps. The steps can include identifying a deviation between a correct interpretation of a data item and an incorrect interpretation of the data item. In a decision network including a hierarchical set of nodes and leaves, a path of traversed nodes in the decision network resulting in the deviation can be determined. The nodes can correspond to queries. A measure of goodness at a node in the path can be calculated using at least one new query as a replacement for an existing query to determine whether the measure of goodness improves using the new query compared to the old query. If the measure of goodness improves, at least one new query can be selected and the decision network can be regrown from the node down through the leaves using the at least one new query at the node.